

NONCOAL  
MR Form 3  
(Revised 1985)

ANNUAL OPERATIONS AND PROGRESS REPORT

1985

(This report must be submitted to the Division by March 31, 1986.)

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING  
3 Triad Center, Suite 350  
355 West North Temple  
Salt Lake City, Utah 84180-1203  
(801) 538-5340

OPERATOR: Chevron Resources MINE NAME: Vernal Phosphate Operation

ADDRESS: Manila Star Route  
Vernal, Utah 84078

PERMIT NUMBER AND DATE OF PERMIT: ACT/047/007

REPRESENTATIVE: Bruce Gilbert

SECTION(S): Various TOWNSHIP(S): 2 & 3 south RANGE(S): 21 east

MINERAL(S) MINED: Phosphate

Section 40-8-15 and Rule M-8 of the Utah Mined Land Reclamation Act, requires each operator to include with this report an up-dated map and plan prepared in accordance with Rule M-3, as outlined in the requirements for annual report maps in Appendix I, providing a detailed status of all mining and reclamation activities which have occurred during the past year.

The report should include:

MINING:

(a) Tabulation of acreage disturbed (by pits, roads, facilities, etc.) during the report period with illustration on a current map.

<u>Disturbance</u>	<u>Acreage</u>
Pit	<u>65.0</u>
Roads	<u></u>
Facilities	<u>25.0</u>
Waste Dumps	<u></u>
Other	<u></u>

(b) Tabulation of acreage affected to date (by years).

<u>Date by Year</u>	<u>Acreage (Total</u>
1975	27.4
1976	27.4
1977	27.4
1978	27.4
1979	27.4
1980	27.4
1981	40.0
1982	41.0
1983	41.0
1984	110.0
1985	65.0

(c) Tabulation of all topsoil (new) stockpile volumes (see chart below) and date of stockpiling.

#### SOIL TABULATION CHART

Area Affected (in mining sequence) (If more space is needed, please attach.)	<u>Area</u>			
	<u>1</u>	<u>2</u>	<u>3</u>	<u>etc.</u>
Acreage of Area	<u>Panels C, D &amp; E 65.0 AC</u>			
Depth of Topsoil Removal (inches)	<u>6 inches</u>			
Depth of Topsoil Replacement (inches)*	<u>6 inches</u>			
Estimate of Topsoil Volume Salvaged (yd <sup>3</sup> or ac ft)	<u>52,433 yd<sup>3</sup></u>			
Volume Actually Salvaged (yd <sup>3</sup> or ac ft)	<u>52,433 yd<sup>3</sup></u>			
Volume Required for Reclamation (yd <sup>3</sup> or ac ft)	<u>52,433 yd<sup>3</sup></u>			
Surplus or Deficit Volume (yd <sup>3</sup> or ac ft)	<u>None</u>			
Storage Status (short- or long-term)	<u>16,500</u>			
Storage Location	<u>Panels C, D &amp; E</u>			
Area Where Soil Has Been Used (if not stored)	<u>Panels C, D &amp; E</u>			
Running Total (all stockpiles) (yd <sup>3</sup> or ac ft)	<u>16,500</u>			
Short-term	<u>14,500</u>			
Long-term	<u>2,000</u>			

\*Of previously stripped area recently reclaimed.

(d) Tabulation of all (newly removed) out-of-pit spoil volumes, date of placement and illustration on a map.

<u>Area</u>	<u>Date</u>	<u>Acreage</u>
All spoils are directly moved into mined out areas and immediately recontoured.		

(e) Tabulation of quantity of commodity mined.

	<u>Commodity</u>	<u>Tonnage</u>
(Mined)	Raw Phosphate Ore	1,278,331
(Milled)	Raw Phosphate Ore	1,249,912

(f) Description of any new construction during the report period with illustration on a map, including, but not limited to:

1. Buildings and support facilities.  
Hydrosizer - Concentrator Building  
Phosphate Slurry Pipeline  
Barge MCC Building
2. Roads.  
Access and haulage roads in Panels D/E area are being prepared in disturbed areas. Refer to disturbance map.
3. Diversion ditches, collector ditches, interceptor ditches, etc.  
None
4. Culverts.  
None
5. Sediment ponds, containment ponds.  
None

6. Monitoring sites (vegetative, air quality, surface subsidence, surface water or ground water, etc.).  
None

7. Topsoil stockpiles.  
Panels C, D & E have a total of 16,500 yd<sup>3</sup>

(g) Description of any environmental problem areas with a proposed plan for mitigation and illustration on a map, including, but not limited to:

1. Pit stability problems.  
None

2. Subsidence.  
None

3. Accidental water discharge, dam failure, etc.  
None

4. Slumping, sliding or erosion.  
None

5. Revegetation problem areas.  
None

6. Existence and location of unsuitable (toxic) overburden.  
None

RECLAMATION:

(a) Tabulation of the acreage reclaimed during the report period with illustration on a map, distinguishing between:

1. Backfilled, graded and contoured areas.

<u>Area</u>	<u>Acreage</u>
Panels D, E	12.5
Panel C	32.5
Panel A (Camp Canyon)	129.0

2. Topsoiled areas.

<u>Area</u>	<u>Acreage</u>
Panels D, E	6.5
Panel C	32.5

3. Seeded areas.

<u>Area</u>	<u>Acreage</u>
Panels D, E	6.5
Panel C	32.5
Panel A (Camp Canyon)	85.0

4. Reseeded areas (areas previously seeded, then seeded again).

<u>Area</u>	<u>Acreage</u>
Panel A below slurry line	5.0

(b) Tabulation of total acreage reclaimed (seeded with permanent seed mix) to date by years with illustration on an updated map:

<u>Year</u>	<u>Acreage</u>
1975	--
1976	27.0
1977	--
1978	13.0
1979	2.0
1980	41.0
1981	23.5
1982	71.0
1983	103.0
1984	138.0
1985	124.0

(c) Description of the reclamation procedures used during the report period, including:

1. Average depth of topsoil applied.  
6 inches

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2. Type of seed (species) used for seeding during the report period.  
Approved mix in 1983 MRP

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3. Date of seeding during the report period.

Spring      April 1 through June 1  
                 Panels A, C & D

Fall          September 15 through November 20  
                 Panels A, C & D

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4. Seeding procedures used.

(Hand broadcast or drilled or any other).

Drilled in areas with slopes of 3V: 1H or less.

Hand broadcast in areas steeper.

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5. Rate of seed application.

Pounds Per Acre of Pure Live Seed (PLS) (if varied, please explain)

Approximately 26 pounds per acre (PLS) - Drilled

Approximately 40 pounds per acre (PLS) - Hand Broadcast

6. Type and rate of fertilizer applied.

0-50-0 at approximately 50 pounds per acre

7. Type and rate of mulch applied.

Native meadow hay from the lower pasture at a rate of approximately 2,000 pounds per acre

8. Rate of irrigation water applied, if any. Please describe any type of sprinkling, or water applied (water truck, etc.).

Watering was limited to Panel "C" directly above the Mine shop. Big gun sprinklers were utilized during June only. Application rate was 250 gpm over 1 acre for approximately 30 minutes per week.

9. Revegetation test plot information.

(Cover, density, productivity, etc.)

Surveys to be conducted during summer 1986

10. Soil analysis results.

None

(a) Description of results of previous revegetation efforts, including:  
(This should be done as applicable.)

1. Types (species) of seed that have germinated and are growing.

N/A

2. Types (species) of seed that are not growing successfully.  
Pending survey of 1986

3. Areas experiencing problems with weeds and weed types.  
None

4. Significant erosional problems.  
None

5. Areas of unsuitable overburden on the surface as related to  
revegetation failure.  
None

6. Procedures used or proposed to correct these problems.  
N/A

7. Acreage and dates of release (upon inspection by the State) of  
revegetated areas.

<u>Area</u>	<u>Date</u>	<u>Acreage</u>
None		

8. Results of soil analysis.  
N/A

(e) Summarization of the reclamation costs incurred during the report period, including itemized costs for each operation (i.e., grading, topsoil replacement, seeding, etc.) and for each type of disturbance (i.e., spoil, haul roads, facilities removal, etc.) on a per acre basis.



	<u>Acres</u>	<u>Cost/Acre</u>
1. Grading	<u>174</u>	<u>740</u>
2. Backfilling	<u>174</u>	<u>740</u>
3. Contouring	<u>174</u>	<u>740</u>
4. Topsoil Replacement	<u>39</u>	<u>560</u>
5. Seeding	<u>124</u>	<u>51</u>
A. Seedbed Preparation	<u>--</u>	<u>--</u>
B. Mulch	<u>14</u>	<u>100</u>
C. Fertilizer	<u>174</u>	<u>15</u>
D. Seed	<u>124</u>	<u>55</u>
6. Other	<u>          </u>	<u>          </u>

BOND INFORMATION:

- A. An updated bond estimate should be included, if required in the Division's approval of the Mining and Reclamation Plan (MRP) or if changes to the MRP have occurred, including a detailed itemization of actual/estimated reclamation costs as outlined in the RECLAMATION section above. The date of the release of revegetated areas from further responsibility for a partial bond release, if applicable, should also be included.

	<u>Amount</u>	<u>Type</u>	<u>Date Posted</u>
Present Bond	<u>\$4.7 Mil</u>	<u>Cash</u>	<u>1/23/86</u>

Increased disturbance, if any:

65 acres in the Mine; 25 acreea for tailings

Increased Bond Amount (attached reclamation estimate).

- B. Bond release.

<u>Acres</u>	<u>Bond Amount Released</u>	<u>Date</u>
<u>--</u>	<u>--</u>	<u>          </u>
<u>          </u>	<u>          </u>	<u>          </u>
<u>          </u>	<u>          </u>	<u>          </u>
<u>          </u>	<u>          </u>	<u>          </u>

ADDITIONAL INFORMATION:

Supply any additional information as requested by the Division related to:

- (a) Permit stipulations (status).
- (b) Other special conditions (status).

APPENDIX I

ANNUAL REPORT MAPS

1. Maps must be clear and legible contour maps or recent aerial photos. The scale should be 1 inch = 500 feet to adequately show topographic features.
2. Map sheets should be of a reasonable size, not to exceed 48 inches on a side.
3. Maps must have a title block with:
  - A. Map title.
  - B. Name and address of permittee.
  - C. Permit and amendment numbers.
  - D. Annual report period.
  - E. Scale, north arrow, contour interval, date of photography, etc.
4. All maps must show:
  - A. Legal subdivisions.
  - B. Permit area boundary clearly shown and labelled.
  - C. Amendment areas clearly shown and labelled.
  - D. Contour features.
5. The following features should all be clearly identified:
  - A. Topsoil stockpiles (numbered and with volumes).
  - B. Settling ponds and sediment control structures.
  - C. Haul roads.
  - D. Pits identified by location, name, number, etc.
  - E. Ramps (numbered).
  - F. Out-of-pit spoil dumps.
  - G. All waste disposal sites including, but not limited to:
    1. Landfill sites.
    2. Carbonaceous waste dumps.
  - H. Diversion ditches.
  - I. Monitoring sites.
6. All areas to be affected by mining and reclamation in the coming year should be outlined and labelled.

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